

Applicant: JORSBOE ET AL.
Serial No.: 09/762,629
Amendment dated: October 7, 2003
Reply to Office Comm.: Sept. 25, 2003

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 25-73 (canceled)

Claim 74 (currently amended)

A process for selecting transformed cells or tissue comprising:

- a) transforming plant cells or tissue that are sensitive to galactose toxicity with one or more polynucleotide molecule encoding one or more enzyme ~~that enhances conversion of~~ useful to convert galactose to UDP-glucose;
- b) exposing the cells or tissue to galactose, wherein galactose is toxic to non-transformed cells or tissue; and
- c) selecting transformed cells or tissue that are insensitive to galactose toxicity.

Claim 75 (previously presented)

The process of claim 74, wherein said one or more enzyme is one or more of:

- i) UTP-dependent pyrophosphorylase;
- ii) UDP-glucose-dependent uridyl transferase; and
- iii) galactokinase.

Claim ~~75~~76 (currently amended)

The process of claim ~~75~~74, wherein said one or more enzyme is two or more of:

- i.) UTP-dependent pyrophosphorylase;
- ii) UDP-glucose-dependent uridyl transferase; and
- iii) galactokinase.

Claim ~~76~~77 (currently amended)

The process of claim ~~75~~76, wherein said one or more enzyme is at least three of:

- i) UTP-dependent pyrophosphorylase;

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- ii) UDP-glucose-dependent uridyl transferase; and
- iii) galactokinase.

Claim ~~77~~78 (previously presented)

The process of claim 74, wherein said one or more enzyme comprises UTP-dependent pyrophosphorylase.

Claim ~~78~~79 (previously presented)

The process of claim 74, wherein one or more enzyme comprises UDP-glucose-dependent uridyl transferase.

Claim ~~79~~80 (previously presented)

The process of claim 74, wherein one or more enzyme comprises UTP-dependent pyrophosphorylase and UDP-glucose-dependent uridyl transferase.

Claim ~~80~~81 (currently amended)

The process of claim 74, wherein said exposing comprises adding galactose to the cells ~~is provided in the~~ culture medium.

Claim ~~81~~82 (currently amended)

The process of claim 74, wherein said exposing comprises providing galactose-1-phosphate ~~is provided by exposing said to the cells or tissue to galactose-1-phosphate~~.

Claim ~~82~~83 (currently amended)

The process of claim 74, wherein said exposing comprises providing galactose ~~is provided by exposing said UDP-galactose to the cells or tissue to UDP-galactose~~.

Claim ~~83~~84 (previously presented)

Applicant: JORSBOE ET AL.
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The process of claim 74, wherein said cells or tissue are further exposed to a galactosidase that produces galactose from a galactose precursor.

Claim ~~84~~85 (previously presented)

The process of claim 74, wherein said cells or tissue are incubated in a culture medium containing one or more galactose precursor selected from: lactose, melibiose, raffinose, stachyose, verbascose, galactinol, galactose pentaacetate and galactose methyl galactoside, and wherein said medium further comprises an enzyme that converts said precursor to galactose.

Claim ~~85~~86 (previously presented)

The process of claim 74, wherein said cells or tissue are incubated in a culture medium containing one or more galactose derivative selected from: galactose-1-phosphate and UDP-galactose.

Claim ~~86~~87 (previously presented)

The process of claim 74, wherein said plant cells or tissue are tobacco, cotton, rape seed, potato, or maize plant cells or tissue.

Claim ~~87~~88 (previously presented)

The process of claim 74, wherein said transforming further comprises transforming said cells or tissue with one or more heterologous nucleotide sequence of interest.

Claim ~~88~~89 (previously presented)

Transformed cells or tissue selected by the process of claim 74.

Claim ~~89~~90 (previously presented)

A transformed plant comprising cells or tissue selected by the process of claim 74.